662260" T2STOh60

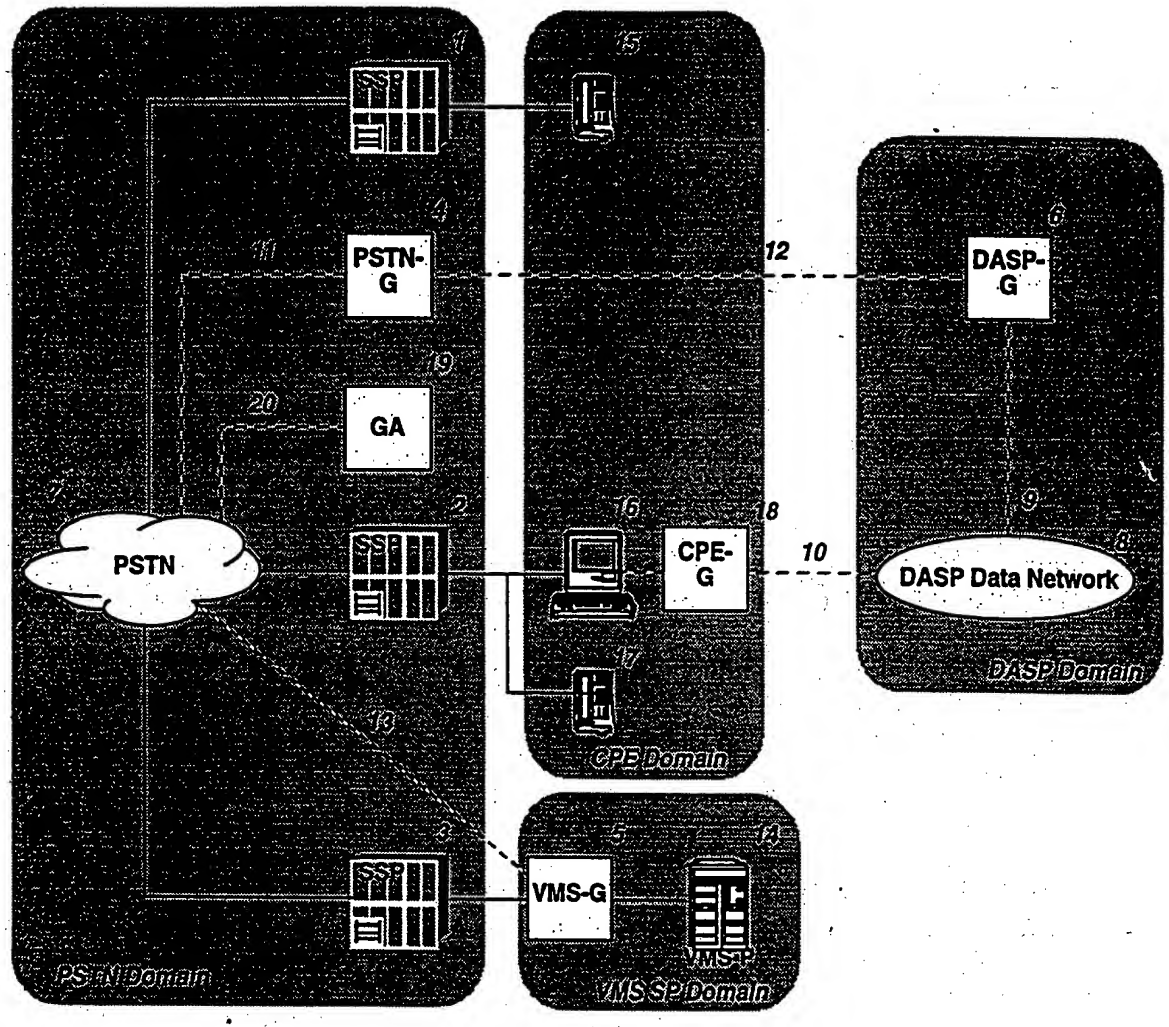


FIGURE 1

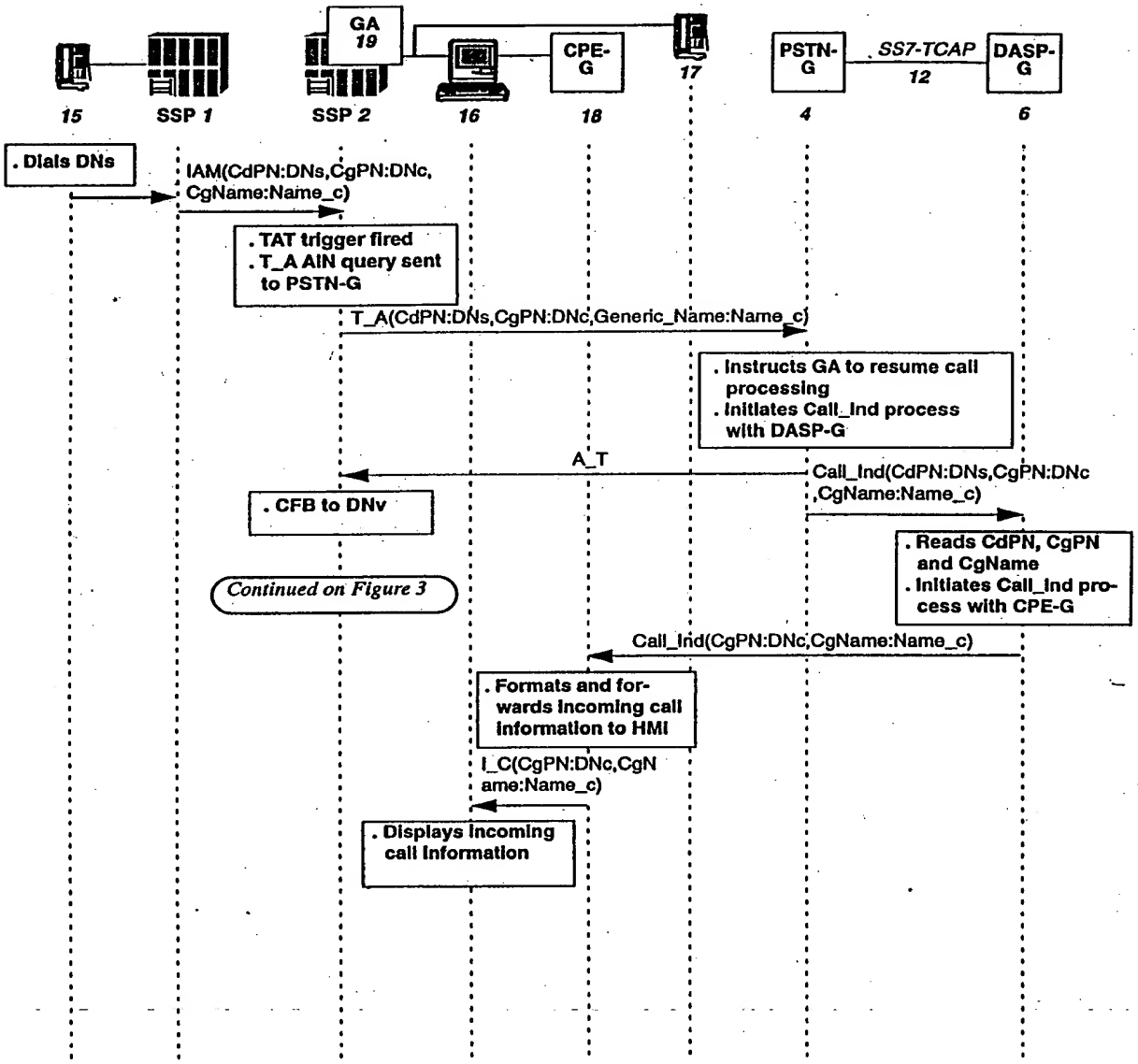

GA
19
CPE-
G
17
PSTN-
G
SS7-TCAP
12
DASP-
G
15
SSP 1
SSP 2
16
18
4
6
. Dials DNs
IAM(CdPN:DNs,CgPN:DNc,
CgName:Name_c)
. TAT trigger fired
. T_A AIN query sent
to PSTN-G
T_A(CdPN:DNs,CgPN:DNc,Generic_Name:Name_c)
. Instructs GA to resume call
processing
. Initiates Call_Ind process
with DASP-G
A_T
Call_Ind(CdPN:DNs,CgPN:DNc
,CgName:Name_c)
. CFB to DNv
. Reads CdPN, CgPN
and CgName
. Initiates Call_Ind pro-
cess with CPE-G
Continued on Figure 3
Call_Ind(CgPN:DNc,CgName:Name_c)
. Formats and for-
wards incoming call
information to HMI
I_C(CgPN:DNc,CgN
ame:Name_c)
. Displays incoming
call information

FIGURE 2

662260 "PCT/US96/10960

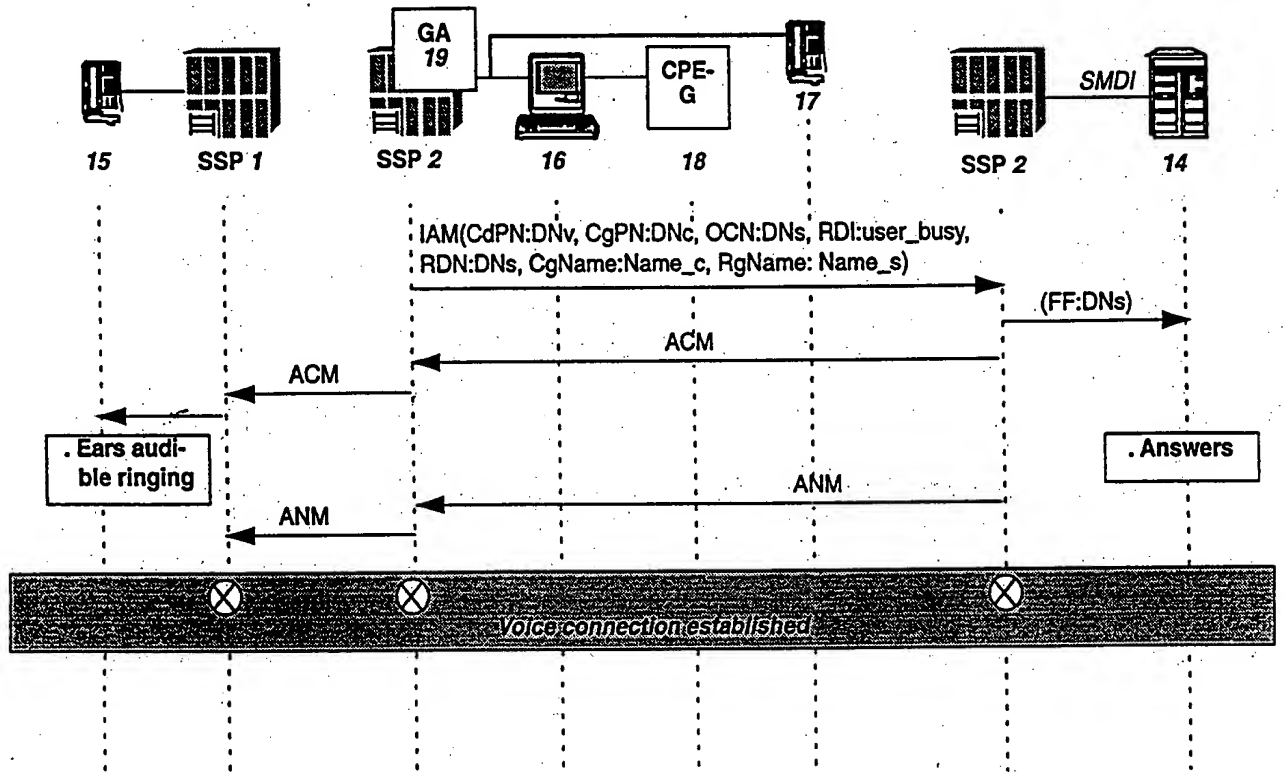


FIGURE 3

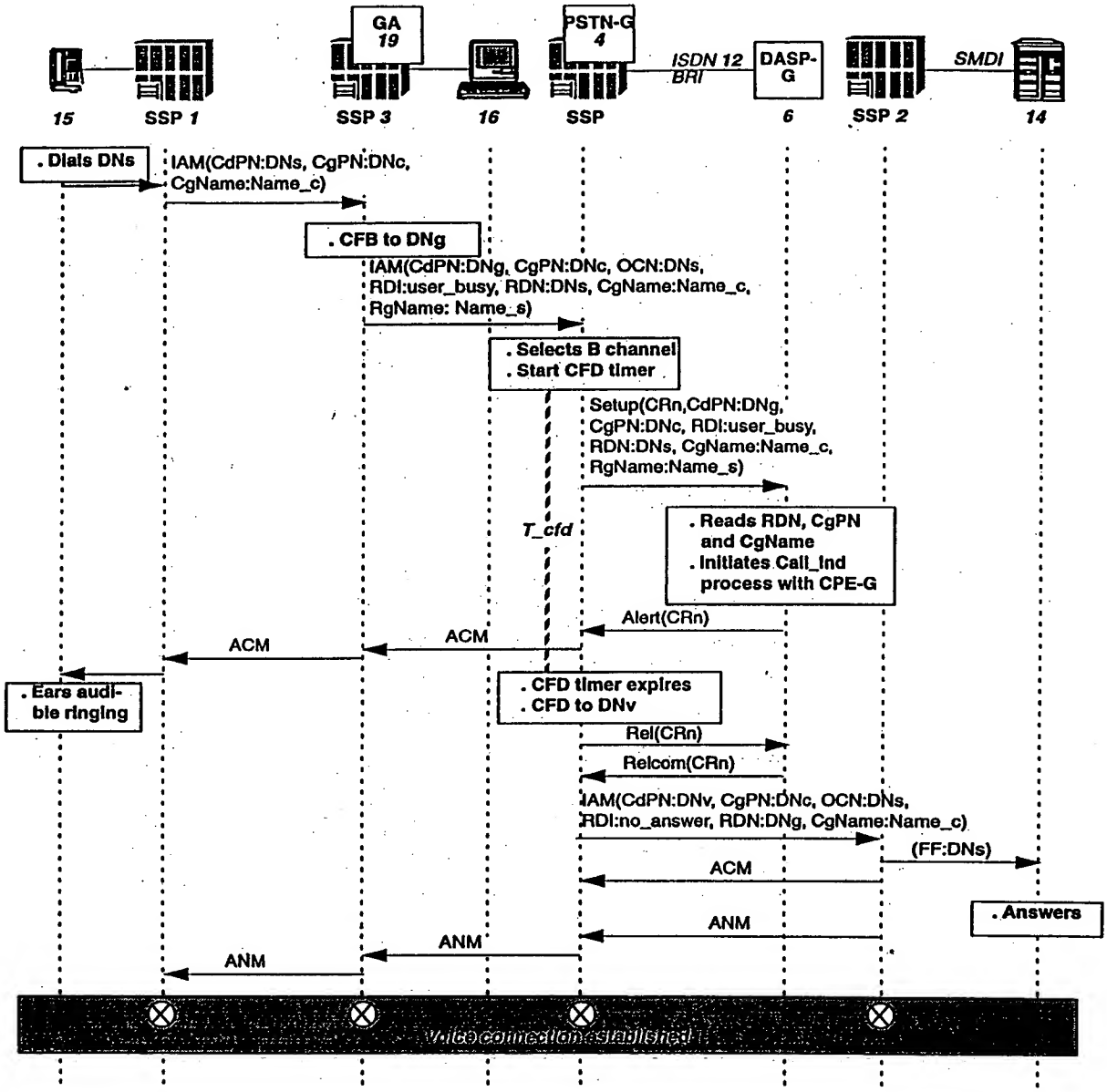
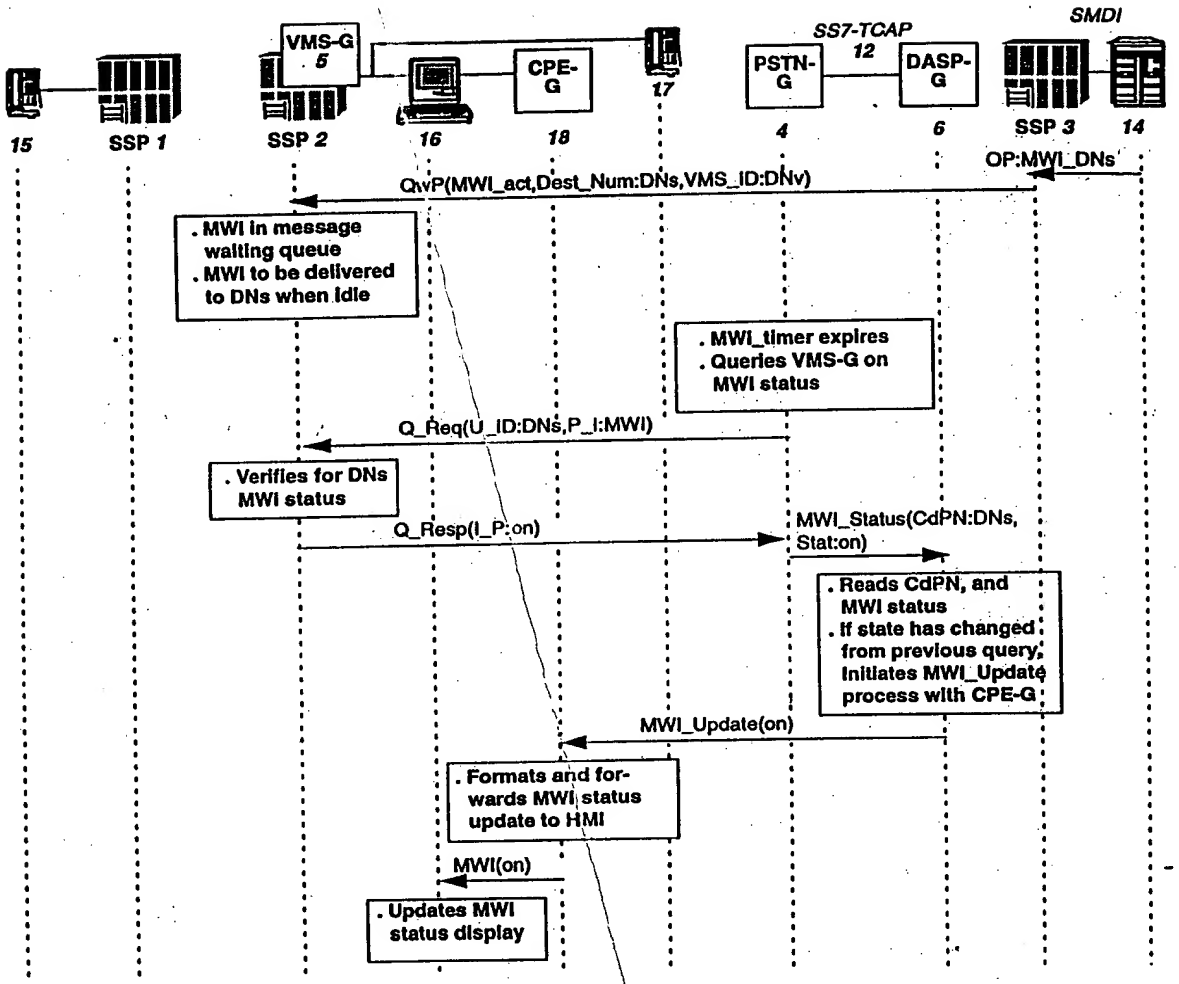

GA 19
PSTN-G 4
ISDN 12 BRI
DASP-G
SMDI
15
SSP 1
SSP 3
16
SSP
6
SSP 2
14
. Dials DNs
IAM(CdPN:DNs, CgPN:DNc, CgName:Name_c)
. CFB to DNg
IAM(CdPN:DNg, CgPN:DNc, OCN:DNs, RDI:user_busy, RDN:DNs, CgName:Name_c, RgName: Name_s)
. Selects B channel
. Start CFD timer
Setup(CRn,CdPN:DNg, CgPN:DNc, RDI:user_busy, RDN:DNs, CgName:Name_c, RgName:Name_s)
T_cfd
. Reads RDN, CgPN and CgName
. Initiates Call_Ind process with CPE-G
Alert(CRn)
ACM
ACM
. Ears audible ringing
. CFD timer expires
. CFD to DNv
Rel(CRn)
Relcom(CRn)
IAM(CdPN:DNv, CgPN:DNc, OCN:DNs, RDI:no_answer, RDN:DNg, CgName:Name_c)
(FF:DNs)
ACM
. Answers
ANM
ANM
ANM
Voice connection established

FIGURE 4



- *U_ID:* *AIN User_ID parameter*
- *OP:MWI* *SMDI MWI activation message*

FIGURE 5

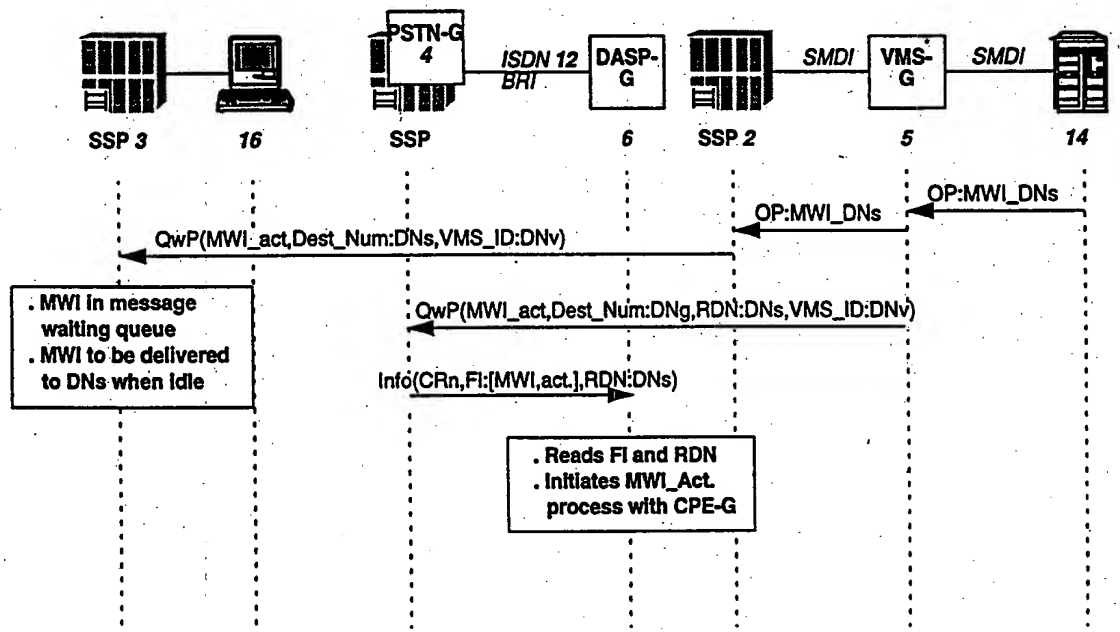

PSTN-G
4
ISDN 12
BRI
DASP-
G
SMDI
VMS-
G
SMDI
SSP 3
16
SSP
6
SSP 2
5
14
OP:MWI_DNs
OP:MWI_DNs
QwP(MWI_act,Dest_Num:DNs,VMS_ID:DNv)
. MWI in message
waiting queue
. MWI to be delivered
to DNs when Idle
QwP(MWI_act,Dest_Num:DNg,RDN:DNs,VMS_ID:DNv)
Info(CRn,FI:[MWI,act.],RDN:DNs)
. Reads FI and RDN
. Initiates MWI_Act.
process with CPE-G

FIGURE 6

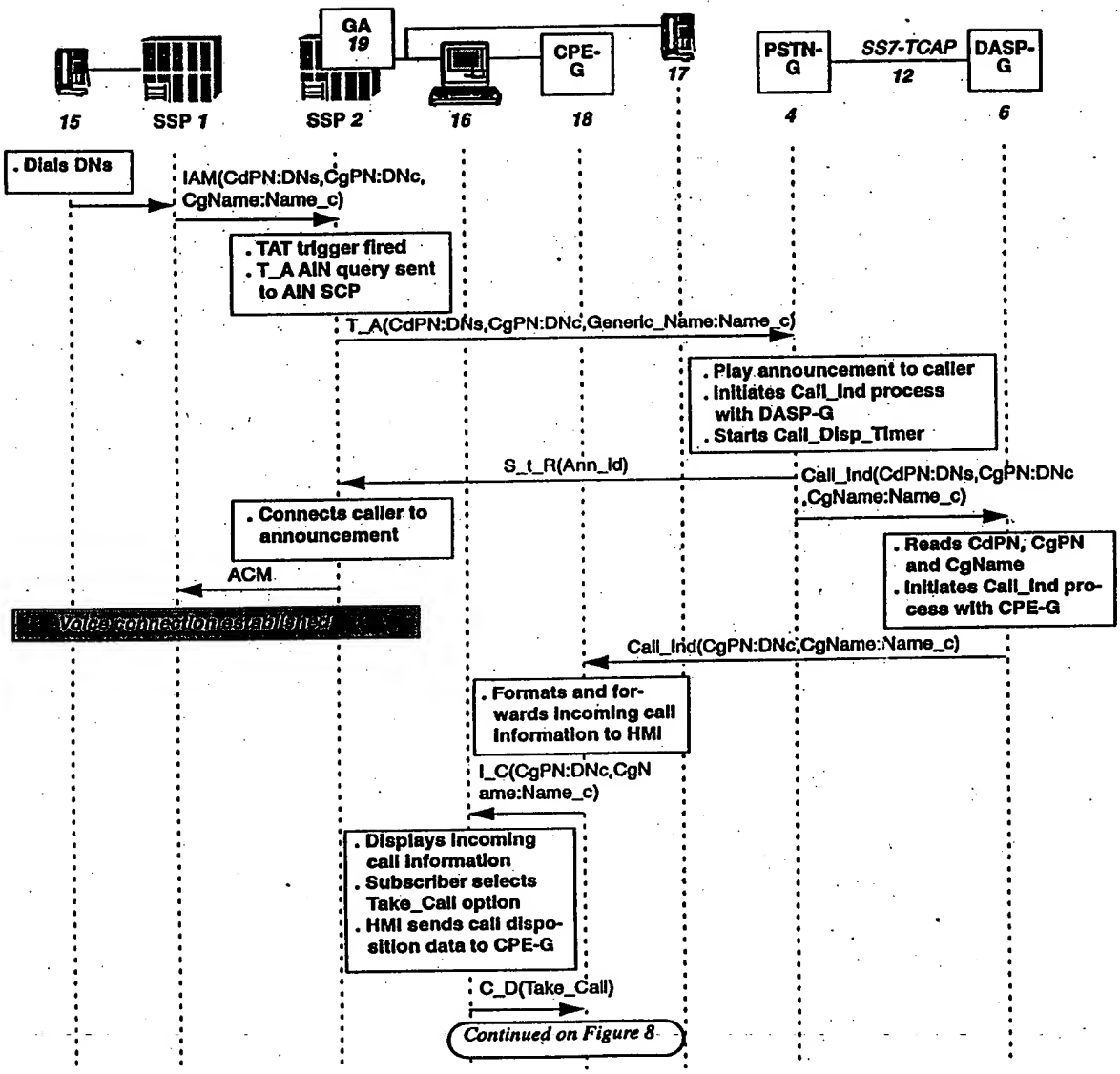

GA
19
CPE-
G
17
PSTN-
G
SS7-TCAP
12
DASP-
G
15
SSP 1
SSP 2
16
18
4
6
. Dials DNs
IAM(CdPN:DNs,CgPN:DNc,
CgName:Name_c)
. TAT trigger fired
. T_A AIN query sent
to AIN SCP
T_A(CdPN:DNs,CgPN:DNc,Generic_Name:Name_c)
. Play announcement to caller
. Initiates Call_Ind process
with DASP-G
. Starts Call_Disp_Timer
S_t_R(Ann_Id)
Call_Ind(CdPN:DNs,CgPN:DNc
,CgName:Name_c)
. Connects caller to
announcement
. Reads CdPN, CgPN
and CgName
. Initiates Call_Ind pro-
cess with CPE-G
ACM
Voice connection established
Call_Ind(CgPN:DNc,CgName:Name_c)
. Formats and for-
wards incoming call
information to HMI
I_C(CgPN:DNc,CgN
ame:Name_c)
. Displays incoming
call information
. Subscriber selects
Take_Call option
. HMI sends call dispo-
sition data to CPE-G
C_D(Take_Call)
Continued on Figure 8

FIGURE 7

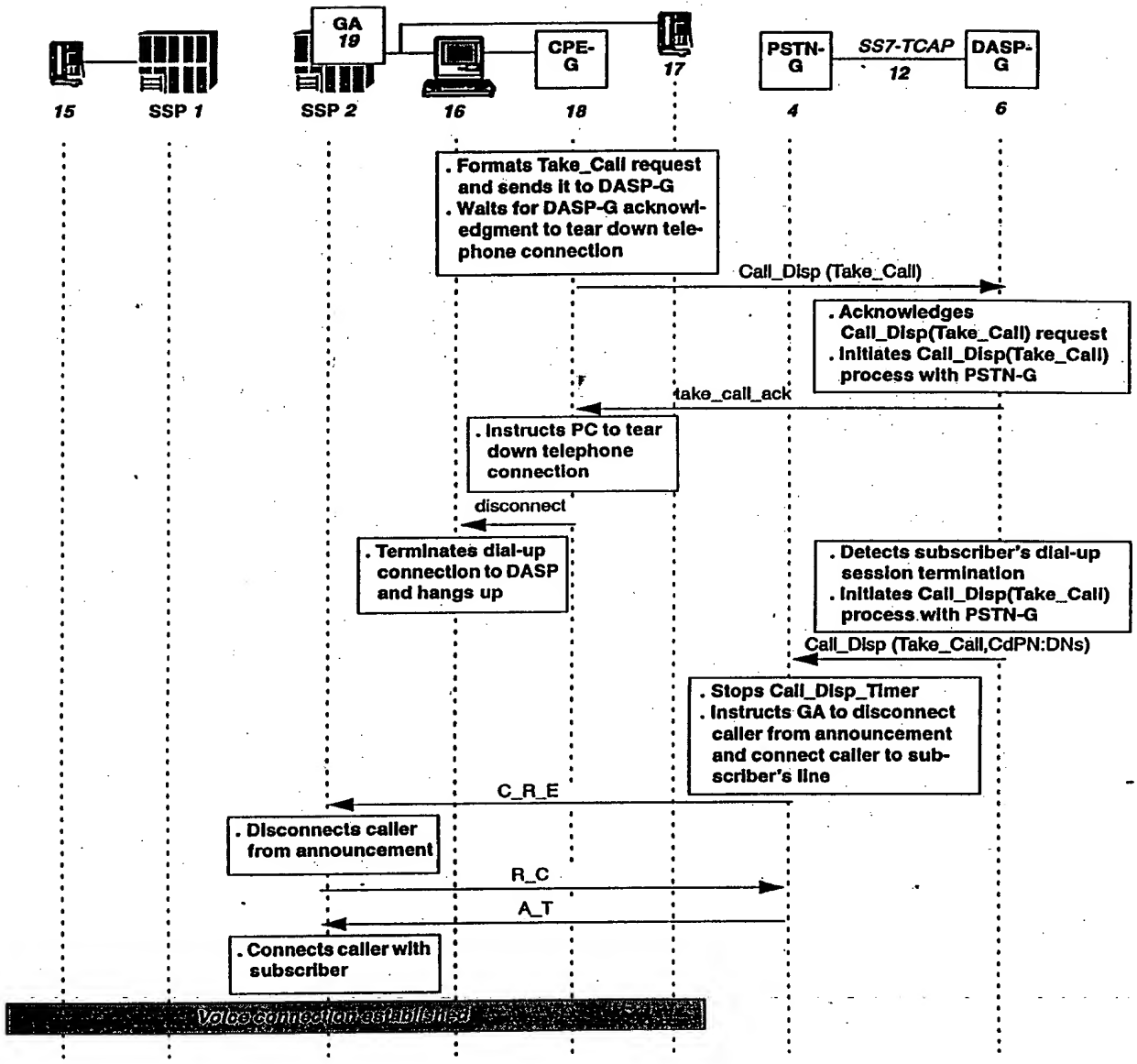

GA
19
CPE-
G
17
PSTN-
G
SS7-TCAP
12
DASP-
G
15
SSP 1
SSP 2
16
18
4
6
. Formats Take_Call request and sends it to DASP-G
. Waits for DASP-G acknowledgment to tear down telephone connection
Call_Disp (Take_Call)
. Acknowledges Call_Disp(Take_Call) request
. Initiates Call_Disp(Take_Call) process with PSTN-G
take_call_ack
. Instructs PC to tear down telephone connection
disconnect
. Terminates dial-up connection to DASP and hangs up
. Detects subscriber's dial-up session termination
. Initiates Call_Disp(Take_Call) process with PSTN-G
Call_Disp (Take_Call,CdPN:DNs)
. Stops Call_Disp_Timer
. Instructs GA to disconnect caller from announcement and connect caller to subscriber's line
C_R_E
. Disconnects caller from announcement
R_C
A_T
. Connects caller with subscriber
Voice connection established

FIGURE 8